



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

### Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

### About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>



FL 15A3 C

BOSTON. MUSEUM OF FINE ARTS  
...The Hermes of Praxiteles...

5553  
B74  
C.2

From the  
**Fine Arts Library**  
Fogg Art Museum  
Harvard University









*Cm*  
MUSEUM OF FINE ARTS.

II 3113

THE HERMES OF PRAXITELES

AND

THE VENUS GENETRIX.

EXPERIMENTS IN RESTORING THE COLOR OF  
GREEK SCULPTURE.

By JOSEPH LINDON SMITH.

DESCRIBED AND EXPLAINED BY

EDWARD ROBINSON,

Curator of Classical Antiquities.



BOSTON:

PRINTED FOR THE MUSEUM BY ALFRED MUDGE & SON,

24 FRANKLIN STREET.

1892.





**MUSEUM OF FINE ARTS.**

---

**THE HERMES OF PRAXITELES**

AND

**THE VENUS GENETRIX.**

**EXPERIMENTS IN RESTORING THE COLOR OF  
GREEK SCULPTURE.**

**By JOSEPH LINDON SMITH.**

---

**DESCRIBED AND EXPLAINED BY**

**EDWARD ROBINSON,**

**Curator of Classical Antiquities.**



**BOSTON:**

**PRINTED FOR THE MUSEUM BY ALFRED MUDGE & SON,**

**24 FRANKLIN STREET.**

**1892.**

~~II. 3113~~

~~FA 5553.4~~



*The Museum*

TRANSFERRED TO  
FINE ARTS LIBRARY.

*March 17, 1964*

5553

B74

c. 2

The present attempt to reproduce the effect of color employed by the Greeks in their marble sculpture was the outgrowth of an exhibition held last year in the Museum of Fine Arts, in which the endeavor was made to place before the public such materials as were available illustrating the data upon which our knowledge of this very important subject is based. Those who attended that exhibition will remember that it was composed principally of plates, water-colors, and colored photographs, showing traces of color as they appear to-day upon such marbles and terra-cottas as retain them to any considerable extent, and that these were supplemented by a few original objects from our own collections on which these traces could be studied at first hand. To give the conclusions to be deduced from these materials a somewhat concrete form, upon a modest scale, casts of two Greek heads — those of the *Hermes of Praxiteles* and the *Venus de' Medici* — were painted by Mr. Charles E. Mills in what he and I believed to be at least an approximate restoration of the original color-scheme, our chief aim being to note the distinction which the Greeks maintained in the color of the flesh between their male and female figures, as shown abundantly in the other objects exhibited.

The interest aroused in the subject by that exhibition, and the desire for further knowledge of it, were so widespread and so frequently manifested, even in the more distant parts of the United States, that it seemed decidedly worth while to continue the experiments this year upon a larger and more ambitious scale. Thanks to the generosity of a few friends of the Museum who have contributed to the expenses of the undertaking, it has been possible to do this. While in Europe last summer I secured full-sized casts of the statues of the so-called Venus Genetrix in the Louvre, and the Hermes of Praxiteles, the latter with the missing parts restored by the late Professor Schaper, of Berlin. The reasons for which these two figures were selected will be explained in the proper place. Mr. Joseph Lindon Smith offered to undertake the difficult task of coloring them. His skill and his sensitive appreciation of all forms of antique art are too well known to visitors of the Museum to need any encomiums here, but no one who has not watched him day by day can form any idea of the patience and courage he has brought to this work, which has presented obstacles of the most unexpected and vexatious nature at almost every turn, with nothing but the most fragmentary data to rely upon for guidance. It has been labor in an entirely new field, one might almost say in the dark, and those who see only the results can hardly guess the number of experiments by which they have been attained, through a gradual process of evolution. The steadfastness of Mr. Smith's desire to carry his archaeological data to their logical conclusion, irrespective of modern ideas of color, has, combined with his taste, produced a result in the highest degree educational. I do not hesitate to say that all parts of this work for which he is responsible seem to me far more satisfactory than any attempts at the restoration of the color of Greek sculpture which I have seen in Europe.

---

That the Greeks did paint their marble sculptures is now generally admitted, though the extent to which colors were applied is still a subject of dispute. For my own

opinions on the matter, and the reasons for them, I should like to refer the reader to an article written for the *Century Magazine* two years ago, which has not yet seen the light. I regret extremely that it should not have preceded our two exhibitions illustrating the subject, instead of following them, but this cannot now be helped; and, as its appearance is now promised in the April number, it would be unadvisable to repeat at the present time the arguments there brought forward. The propositions which I endeavored to prove, however, I may venture to quote, as it is upon these that the present experiments are based:—

1. That, from the beginning of their art of sculpture through its whole course, it was the practice of the Greeks, and following them the Romans, to paint their marble statues and reliefs.

2. That this application of color was not restricted to certain details, but covered the entire surface of the marble, both nude parts and draperies, with the possible exception of portions where the natural color of the marble served its purpose in the general scheme.

3. That the colors used were not merely tints, but real body colors, the aim of which was to imitate nature in the matter of color just so far as the sculpture itself did in that of form,—that is, with a conventional idealization or generalization by which the unpleasant features of realism were avoided.

Assuming that these propositions were proved in the article alluded to, the next step was to give them practical illustration. This, as already remarked, was attempted in the case of the head, in last year's exhibition; but Mr. Smith and myself wished to see whether, by collecting all the data within our reach, and piecing these together, we could reconstruct a complete scheme for the coloring of a male and a female statue, showing the treatment of draperies as well as of flesh, and at least suggesting the extent to which certain details not at all indicated in the modelling—such as borders, for example—were elaborated in color, this being one of the most surprising revelations of the discoveries of recent years. The statues unearthed on the Akropolis since 1882, and the marvel-

lous sarcophagi from Sidon, show how little of what the Greeks put into their sculpture is left us in the remains which retain no more than the form, chiselled in white marble; and, imperfect though our knowledge may yet be, it is time we put it to some use. The first experiments must inevitably be faulty, but, if these do no more than inspire better ones, they will have served their purpose, so that we may finally hope to see just what the Greeks saw when they looked upon one of their immortal creations fresh from its sculptor's studio.

It should be stated here that similar experiments have been made elsewhere within the last few years, and notably at Dresden, where the interest of Professor Treu, director of the sculptural collections, has led to several valuable exhibitions of well-known works of sculpture with conjectural restorations of their colors, done by Dresden artists under his direction. A similar exhibition was opened this winter at the Art Institute of Chicago, under the charge of Professor Alfred Emerson, the curator of classical antiquities. It would be going too far from our present purpose to describe or discuss these various exhibitions, more especially because Mr. Smith has not seen any of them, and therefore in his interpretation of the remains of color upon which his restorations are based, he has not been influenced by the experiments or theories of others. This is important to note, because, in a subject where instinct must be the only guide long beyond the point where a knowledge of facts has ceased to be of any service, if different artists arrive independently at the same, or approximately the same results, their experiments will have the greater value.

To carry out our purpose as fully as we desired, it was necessary to have, first, a female figure, considerably draped, with two garments if possible, for the sake of showing a variety of color, yet with sufficient of the body exposed to give a satisfactory idea of the flesh-color elsewhere than in the face. It was, moreover, obviously desirable to have a figure as complete, and with as little modern restoration, as possible. The so-called Venus Genetrix of the Louvre seemed to answer all these requirements quite satisfac-

torily. Her drapery offered extremely interesting material for study, because of the contrast in texture between the outer and inner garment; and the unusually thin and clinging quality of the latter, so well expressed in the sculpture, would demonstrate admirably—in the matter of drapery—whether the addition of color heightened or diminished the effect of the modelling. The statue has undergone but little restoration, the only modern parts of any consequence being the neck, the left hand and wrist, with the apple, and the fingers of the right hand with the corner of the mantle held by them.\*

In contrast to this we wished to show a nude male figure, of the athlete type; and the Hermes was selected partly because its celebrity would give the experiment an added interest, and partly because, being the most exquisitely modelled of all known statues, it would prove, better than any other, whether form and color are inevitably antagonistic to each other in sculpture,—whether, in other words, the introduction of the one necessarily involves a sacrifice of the other.

If we accept Reinach's theory as to the Venus Genetrix, namely, that it represents a type which, in the form in which we see it, originated with Praxiteles, or some other Athenian sculptor of his time, having been modified from an earlier and more severe work,† then both statues chosen belong to the same school and epoch,—about the middle of the fourth century, B. C.; and in colors and designs we have aimed to illustrate, as far as our knowledge would permit, the characteristics of that period.

What may be called first-class testimony regarding the period in question, that is, traces of color left upon the marbles which date from that time, is extremely rare. A scrap here and there enables us to make comparison with the evidence of earlier and later periods, and in this way

---

\* The best description of the statue is by S. Reinach, "La Vénus drapée au Louvre," in the *Gazette Archéologique*, 1887, pp. 250 ff. and 271 ff. It is briefly described in the *Catalogue of Casts of our Museum*, Part III., No. 545.

† *Ubi supra*, p. 281.



reach conclusions which are more or less satisfactory, as the case happens to be. But of indirect testimony there is an abundant supply, the best of which is that given by the terra-cotta figurines. Of these, this, known as the "Tanagra period," produced the finest examples.\*

The value of the testimony of these little terra-cotta figures in regard to the coloring of marble sculpture has often been disputed. It is argued that the archæologist of the future might just as safely draw inferences from Dresden or Sèvres figures as to the color of the sculpture of the present. This is perfectly true if the question at issue be whether the larger forms of sculpture were colored at all. But granted that this fact has been proved; admitting not only that we have indisputable evidence that the marble statues were colored, but that scraps of color have been found upon them which correspond in character with those seen on the same parts of terra-cottas of the same period, then, it seems to me, we are warranted in assuming that the other portions of the marble statues, as to which direct evidence is lacking, were treated in the same taste, as regards the quality and combination of colors. And if, in what color remains upon them, the marble statues agree in one important particular not only with the terra-cottas but with the figures in wall-paintings, we certainly have good reason to believe that the Greeks had a common scheme for the coloring of their figures, whether large or small, sculptured or painted; and in default of evidence to the contrary we are justified in applying what we learn from one of these forms of art to either of the others, for any points on which their own evidence is lost.

Such agreement does exist. Let us take the flesh-color

\* In assigning the middle of the fourth century as the date of the most characteristic of the Tanagra figures, we are following the French authorities, especially M. Edmond Pottier, to whose excellent manual, *Les Statuettes de Terre Cuite dans l'Antiquité*, Paris, 1890, the reader may be referred. The subject in question is discussed in Chapter V., p. 108. In his opinion, Pottier follows Rayet, *Études*, pp. 278 ff., Heuzey, *Les femmes voilées (Monuments Grecs)*, 1874, p. 6), and others. — On the other hand, some of the German writers, chief among them Furtwängler, have assigned these figures to a later date. *Collection Saburoff*, Vol. II., pp. 4 ff.

of males as an example. So far as I am aware, this is, on terra-cottas, invariably a strong ruddy color, generally described as dun red or brown red,\* varying in quality according to the period and the character of the figure upon which it is found. Turning to marble sculptures and beginning with the period of our two figures, this same color was observed by Sir Charles Newton on the nude parts of the warriors of the frieze of the Mausoleum, at the time of discovery, in 1857, though all traces had completely disappeared when the marbles reached London.† This monument, it will be remembered, though erected in Asia Minor, was the work of eminent Athenian sculptors, and therefore represented the principles of the Attic school of its time. I can recall no other important marble works of that period which retain traces of flesh-color, but this will suffice to establish its existence. The same color is found on the most primitive of Greek sculptures, such as the oldest metopes of Selinus‡ and the archaic pediment relief found on the Akropolis of Athens;§ and as late as Roman art we find it still maintained, sometimes on the sculptures themselves, but most convincingly in the wall-paintings and mosaics, where it is used in precisely similar shades for representing both living figures and statues. Indeed, the latter are to be distinguished from the others in these paintings only by the fact that they are on pedestals or in niches. The Amazon Sarcophagus in Florence, which is decorated with paintings upon a flat surface, and dates probably as early as the beginning of the third century, B. C., gives the best extant evidence that painters, as well as sculptors, used this as the color for their male figures long before the Roman

---

\* There is an exception in the case of young children, who are painted much paler, like women.

† See Newton's *Travels and Discoveries in the Levant*, Vol. II., p. 131, and the corroborative testimony of others who saw the sculptures before they were transported, in the Notes at the end of the volume, pp. 271 ff.

‡ Benndorf, *Die Metopen von Selinunt*, p. 46.

§ Meier, in the *Mittheilungen des Instituts in Athen*, 1885, p. 240.

period.\* Thus we have established one important detail in which the makers of terra-cottas followed the principles of the sculptors and painters.

A similar analogy between these different branches of art exists in regard to the color adopted for the flesh of women, which was decidedly lighter and higher in key than that used for men. Here, unfortunately, materials are less abundant. Testimony of the first class is lamentably deficient, as might be expected with such delicate colors, more particularly since it is only within a comparatively short time that excavators have been on the watch for traces of color upon marbles, and have taken pains to preserve them. But on terra-cottas it will be found that the women are always very fair. Through the mists of two thousand years it is almost impossible to determine precisely their original color, yet it seems to be but little removed from white, with a decided pink flush in the cheeks, and very red lips. Probably the best preserved of all Greek terra-cottas is the beautiful little Sphinx in the Ermitage at St. Petersburg, which looks as fresh as though it had left its maker's hands only yesterday.† The lovely face is unquestionably of a fourth century type, and has the color scheme I have described. Those who will take the trouble to examine the terra-cottas in our collection will observe the same scheme, and also the high, but not hard, key, obscured though it frequently is by dirt and incrustations. Of marble statues or reliefs which retain traces of the female flesh-color, I do not remember an example of the fourth century; but going back to the early stages of Greek art, we find it among the statues discovered on the Akropolis, and most conspicuously upon the head crowned with a large diadem, which is reproduced in the

---

\* The best reproduction of the colors on this sarcophagus is in the *Journal of Hellenic Studies* for 1883, pls. XXXVI.-XXXVIII. The copy of the sarcophagus in the Room of the Classical Antiquities also illustrates the point in question.

† Published, but unfortunately not in color, in the *Compte-Rendu de la Commission Archéologique de St. Pétersbourg*, 1870-71, pl. 1. Described by Newton, in his *Essays on Art and Archaeology*, p. 390.

collection of Gilliéron's water-colors and colored photographs, in the possession of the Museum. The flesh of this head still retains its colors in all their brilliant crudeness. It is now absolutely white, with a strong hectic spot on each cheek, and scarlet lips. The eyes, by the way, are heavily outlined in black. At least a century later, that is, about the middle of the fifth century, B. C., we find indications of a similar scheme, already advanced in refinement, on the well known gravestone of Philis, in the Louvre.\* Upon this M. Prachov, who described it in 1872, remarked, "Le marbre conserve encore des traces de peinture, même — ce qui est très rare dans la sculpture antique — sur les chairs, surtout sur la joue, où la couleur forme une légère couche rosâtre."†

Corroborative testimony, of what might be called the circumstantial kind, is offered by the metopes of the latest of the temples at Selinus, which present this peculiarity, that while their material is brown tufa, the visible parts of the flesh of the female figures, such as the heads, hands, and feet, are made of white marble and inserted. No such distinction is made in the case of the males, which, like the rest of the sculpture, are carved in the coarse, porous tufa. Assuming that these metopes were painted, like the earlier ones from the same site, the reason for this is obvious. The male figures, being painted the usual male color, there would have been no object in inserting white marble in the nude parts of these; while the tufa, being coarse and yellowish, would not answer so well as white marble, as a basis for the color of the women.

Here, again, therefore, we find that the terra-cottas of the fourth and later centuries, followed, in a more refined degree, the methods adopted upon larger sculptures in the sixth and fifth. And that the traditional usage was preserved as late as the Roman Empire is proved beyond question by the wall-paintings of Pompeii and other sites, in which women, whether statues or individuals, are repre-

\* Mrs. Mitchell's *Selections of Greek Sculpture*, pl. II.; a cast in the Third Greek Room, No. 93.

† *Annali dell' Istituto*, 1872, p. 185.

sented with the same pink and white skins. The Amazon Sarcophagus confirms the evidence in this respect as it does in the color of the male figures.

Corroborated as they are in these important particulars, it seems to me the terra-cottas have completely vindicated their right to be heard in the discussion concerning the colors used on marble statues, and we have not hesitated to make use of their testimony. Yet to go to the other extreme, and assume, as is sometimes done,\* that the terra-cotta figurines are merely statues in miniature, seems to me decidedly a mistake. Their art is distinctively their own; in the majority of cases their conception, like its treatment, is light, graceful, and pretty; but it is also distinctly *petite*, unsuited to monumental sculpture. Pottier has shown that the white coating which underlies the colors was applied, not with the intention of imitating marble, but for the purely practical purpose of filling up the pores of the clay, and producing, in color and texture, the most suitable ground for the delicate shades which were to be laid over it.†

From what has been said, the reader will have inferred the reasons for the colors given to the flesh of the Hermes and the Venus, and the sources from which the choice was derived. While no one monument has been followed absolutely, Mr. Smith has found the colors on the Amazon Sarcophagus (as reproduced in the *Journal of Hellenic Studies*, *ubi supra*), the most satisfactory as a basis, and what modification of these he has introduced has been the result of comparison with other remains. I cannot too frequently repeat that we do not claim to have attained absolute correctness of the shade reproduced, however carefully we have endeavored to do this; but in key, in general tone, and in the contrast between male and female color, we have reason to believe that these two figures illustrate the Greek methods. It is curious to note, in passing, that this difference in color between the sexes, which is, of course, much greater than would be found in nature among people of the same race, is quite like that adopted

\* Treu, *Sollen wir unsere Statuen bemalen?* p. 32; Emerson, *Catalogue of a Polychrome Exhibition*, etc., Chicago, 1892; etc.

† *Les Statuettes de Terre Cuite*, p. 258.

by the great Venetian painters centuries later. Their women, it will be remembered, are always pink and white, and their men a deep ruddy brown—with them, as with the Greeks, it was a convention, or an idealization, as one may please to call it, which formed an important factor in elevating their figures above the sphere of realism.

The flesh-color, it will be observed,—and indeed all other colors,—are put on perfectly flat. Comparison of Greek fragments shows clearly that there must be no gradations of shade, no attempts to model with the colors. The shadows belong in the province of the sculptor. If he has done his work well, a perfectly uniform application of color will result in all the play of light and shade which could be desired,—nay the modelling even produces a variety of shades and tones in the color itself, as may easily be seen on these two statues. Any attempt to deepen the mixture in the shadows will cause an exaggerated and distorted effect. There are certain details, such as the lips, cheeks, and ears, where the natural color of the skin is deeper than elsewhere, and these must be treated accordingly; but I believe there is no warrant for varying the intensity of the ordinary flesh-color in different parts of the figure, or for applying it more thinly in one place than in another. There is one possible exception to this rule, in cases where it is necessary to vary the mixture in order to preserve the value. For example, the left hand and wrist of the Venus, when painted with exactly the mixture used upon the bosom, produced a different effect, owing to its proximity to the deep color in the border of the cloak. Therefore, to make it look the same, Mr. Smith was obliged to alter his mixture somewhat, and this I think he was justified in doing.

The general rule followed in the treatment of these two statues has been, first to mix the colors to the desired shade, then apply them, with either the brush or fingers, in such a way as to leave the surface perfectly smooth and finished. There must be no trace of brush marks, or other "painty" effect. When completed, the color must be as uniform and even as the marble itself. This effect can be attained only by a process of rubbing in; and thus we are led by

circumstances to the simplest and most direct interpretation of the vexed word *circumlitio*, in Pliny's oft-quoted anecdote about Praxiteles and Nikias the painter.\*

*Circumlitio* means literally a "smearing around," and this is precisely the means employed on these two statues, simply because it was found to be the most practical. No effort was made to follow the processes employed by the ancients, our aim being merely to produce the same results by whatever method was found most convenient. To follow ancient processes, even had we known enough about them to make this possible, would have been useless pedantry, first of all because the material Mr. Smith was working on was plaster, not marble, and therefore offered an entirely different surface; and also because one great object which the Greeks must have had in view, in choosing and perfecting their processes, was to protect the colors against sun, wind, and rain, and this we have not had to consider. But what little we know about the mediums they used gives us an idea of their finish. There is, for example, abundant proof that wax was employed with the colors, on both sculpture and architecture. It may have been mixed in the medium or applied afterwards, as a finish. In connection with this question there is another frequently quoted passage, from Vitruvius (Book VII., Chap. 9), of which we made use. In describing the method of making vermilion permanent, when used on exposed parts of buildings, he says that when dry the color should be rubbed with Punic wax, mixed with a little oil, then heated, so as to make it lie even, and finally rubbed with a candle and clean cloth, "as they do nude statues." The flesh of the Venus was treated in this manner, as an experiment. The medium used in applying the color would not give a satisfactory finish, though it had been highly recommended for the purpose.† It worked

\*Pliny, speaking of Nikias, the most famous painter of his day in Athens, says, "This is the Nikias to whom Praxiteles referred when, on being asked which of his marble statues he liked the best, he replied, 'Those to which Nikias has put his hand,'—so highly did he value the *circumlitio* of that artist."—N. H. XXXV., 133.

† It was copal flattening varnish.

unevenly, giving either no lustre at all, or an effect of varnish. What we desired was a cool lustre, like the surface of ivory. After a number of vain attempts it was sand-papered down to a dead, even finish, and then, under the inspiration of Vitruvius, rubbed over with a wax candle and a piece of soft silk, producing the present effect. The same effect could have been attained with less labor had the medium been a better one, as Mr. Smith learned before he began the *Hermes*; but the experiment as it stands is an interesting commentary on the passage quoted.\*

We come now to the explanation of the details of the two statues, beginning with the *Venus*. The hair is gilded, in conformity with a practice which, though perhaps not universal, was certainly very general, as traces of it have been found upon marble statues, terra-cotta figures, and occasionally even upon figures on vases of the later styles.† The most famous instance in which it has been found upon a statue is that of the *Venus de' Medici*, but this is by no means the only one. It is a well-known fact that the Greeks had a great admiration for blonde hair, and that their women did not hesitate to resort to artificial means to produce it.‡ But the gilding, if applied solid, that is, without being combined with color, deprives the hair of its distinctive quality, inasmuch as it neutralizes to a great extent the play of light and shade produced by the modelling, and has the appearance of a cap. Therefore, following the example of the terra-cottas, a light auburn red was also used, this being applied only in the

---

\* The medium used on the *Hermes* was recommended by Mr. Frederic Crowninshield, and is described in his book on *Mural Painting*, p. 38. The recipe is as follows:—

8 sheets apothecary's white wax, about  $\frac{1}{2}$  ounce each.

$\frac{1}{2}$  pound Venice turpentine.

1 quart spirits of turpentine.

This will leave an absolutely dead surface if desired, or it can be rubbed to any degree of lustre. It is very satisfactory.

† See Gerhard, *Akademische Abhandlungen* I., p. 97.

‡ Hermann, *Griechische Privatalterthümer*, Third Edition, pp. 34 and 201.



grooves and other depressions, the gilding showing on the ridges, and generally upon the high lights. The fillet and net are of a dark purplish blue, decorated with a simple "honeysuckle" pattern in gold. The brows are a dark brown, treated as a mass, that is, with no attempt to draw the hairs. The eyes are gray, slightly tinged with blue, the pupil and rim of the iris being clearly defined in black. These and the black lines marking the lashes are in exact accordance with remains upon many marble statues.

For the colors of the draperies we have relied mainly upon the evidence of terra-cottas, for reasons which have been set forth above. Although there are many marble figures retaining traces which are sufficient to prove that it was a common custom to color the garments of statues, there is none which gives a complete idea of the color-scheme it originally presented. Perhaps the most satisfactory known at present is the marble statuette of Aphrodite found at Pompeii, and now in the museum of Naples,\* but even that is far from adequate, and the colors surviving upon it, green and yellow, do not suggest a pleasing combination. We shall look to the publication of the sarcophagi from Sidon to give us more satisfactory instruction in this matter.†

The terra-cottas, with their delicate shades of blue, pink, saffron, and other colors, give us a conception of Greek taste in the color of garments which corresponds perfectly with what we learn from literary sources. These show that, from the earliest times, the Greeks were fond of bright and variegated shades; and that, in their conception of beauty, color was always an important element. There are many evidences of this in the Homeric poems, one of the most striking being in the Hymn to Aphrodite, where the goddess, to entice Anchises, had made herself as beautiful as possible, and

---

\* Published in color in the *Archäologische Zeitung*, 1881, pl. 7, with an essay by Dillthey, p. 131.

† The first part of this important work, *Une Necropole Royale à Sidon*, by MM. Hamdi-Bey and Th. Reinach, is to appear in March.

"stood before him, like in height and form to an unwedded virgin. . . . But Anchises, seeing her, pondered and was amazed at her figure and size and splendid garments. For she wore a peplos more brilliant than the gleam of fire, and she had well-twisted brooches, and glittering ornaments; and around her soft neck there were most beautiful necklaces, beautiful, golden, all variegated; and like the moon she shone about her soft shoulders, a wonder to behold."\*

These Homeric descriptions show to what a degree the early Greeks shared in that love of gorgeous color which we associate with the Oriental nations; and their enjoyment of oriental stuffs is well known to readers of the epic poets. With the development of their civilization, they do not seem to have ever lost this love of bright colors, although their instinctive tendency towards refinement led them away from primary or strong shades. For the garments of women, white was perhaps more popular than any one color, but it was by no means the only favorite.† Yet it has been remarked that in classical literature, abstract names for colors, such as red, blue, and green, are seldom met with; the shade being usually described by an adjective derived from some analogy in nature, like frog-color, myrtle, apple, amethyst, violet, hyacinth, saffron, rose, wave-color, etc.‡

What we learn from literature on this point is confirmed by the terra-cottas. Although the aggregate number of colors preserved upon them is small, the variety of shades is very large; but, among those of the better epochs, hard or positive tones are extremely rare, even with due allowance for the softening influences of time. Red is modified into various degrees of pink or crimson, yellow is softened

---

\* *Hymnus ad Venerem*, Ed. Baumeister, 82-90. On the precise nature of the ornaments mentioned, see Helbig, *Das Homerische Epos*, § xx.

† Blümner, *Technologie*, I., p. 251; Becker, *Charikles*, Excursus I. to Scene III., etc.

‡ Semper, *Der Stil*, Second Edition, I., p. 195; Blümner, *ubi supra*; Hermann, *Privataltenthümer*, § 22; etc.

into primrose or saffron, and there are many shades of blue for which we have no distinctive name.

Now, as regards the Venus, there is absolutely no trace upon the original to show what was the original scheme of color. The attempt made by Mr. Smith, therefore, in his restoration, was not to demonstrate how she *was* colored but how she might have been. Pinks and blues being frequently found on the draperies of terra-cottas of the fourth century, these colors were chosen for her garments, the shades being copied from Tanagra figures in our collection. Her chiton is a pale, delicate blue, and her himation a salmon pink, with a dark purple border. From the clinging character of the small folds upon the torso, we inferred that the sculptor's intention was to represent silk, and Mr. Smith has treated it accordingly, giving it a soft sheen, but not attempting to make it transparent in color.

Perhaps no feature of the costume will excite so much interest as the borders, of the presence of which, as previously remarked, the sculpture itself gives no indication. But that it was the custom to add borders in color to marble statues, has long been admitted, in the face of indisputable proofs, even by those who have been unwilling to agree that the whole surface of the marble was painted. The elaboration and variety of these borders, however, was hardly suspected until the discovery of the archaic statues on the Akropolis, to which reference has already been made.\* It was at first our intention to copy and restore one of these as the decoration of the dress of the Venus, but we concluded that the geometric severity of the designs would not be in keeping with the art of the fourth century, and that something more florid would be more appropriate † The one finally selected is copied, with some variations, from the dress of a figure on a vase of the fourth century, published in the *Monumenti dell' Istituto*,

\* These are fully illustrated in the water-colors and colored photographs, by M. Gilliéron, which were purchased by the Museum of Russell Sturgis, of New York.

† The best and most exhaustive essay on the borders and patterns of Greek garments is by Stephani, in the *Compte-Rendu* for 1878-79, p. 40.

II., pl. LIX., the principal motive of which is a band of sea horses encircling the dress. These, on the Venus, are painted a dark blue upon a lighter blue ground, both colors being considerably deeper than that of the dress itself. On the vase this border is surmounted with long, vertical rays, but as these were not well adapted to the statue, a rich "honeysuckle" pattern was substituted, the design being similar to that on the Erechtheion, though ours was copied from a fragment of Greek embroidery in St. Petersburg.\* The petals of the flowers are alternately lilac and violet; and in both this and the border of sea-horses, gilding has been freely used, though in fine lines, to pick out details and outlines. The whole border is about eight inches wide at the bottom of the dress, and half that width at the neck. Along the edge of the dark border of the himation runs a narrow, simple vine-pattern in gilt, copied from another bit of stuff in St. Petersburg.†

As to her jewels, evidence that she wore them is still preserved, her ears being pierced, and her left arm showing a hole above the elbow, where the clasp of the chiton was fastened.‡ Similar holes show that earrings were worn also by the Venus of Melos, the Venus de' Medici, the Eirene of Munich, and many other well-known statues. Some suggestion of the shape of the earrings on this figure is given by the ears themselves, the lower part of which is flattened in a manner which shows that it was cut or filed away so that the earring might lie flat against it. As this cutting is rounded on the top, it is probable that the jewel was disk-shaped, though whether there were pendants attached to it there is nothing to determine. We confined ourselves to the simple disk, which Mr. Smith modelled from a gold ornament, published in the *Compte-Rendu*, 1865, pl. III., No. 34. For the shape of the shoulder-clasps, a disk was also chosen, decorated with a Medusa-head (Ibid, No. 6).

The presence of the soles of the sandals shows that there

---

\* *Compte-Rendu*, 1878-79, pl. III.

† Ibid, pl. v., No. 4.

‡ S. Reinach, *Gazette Archeologique*, 1887, p. 251, and pl. 30.

must have been straps also, although they were not indicated by the sculptor. They have therefore been represented in color, being gilt, decorated, on the broad strap, with a simple floral pattern in white. The soles are red on top and gilt on the sides, this being the combination most frequently found on terra-cottas, on which, however, yellow is often used, instead of the gilding.

Slight scraps of color still remained upon the Hermes when the statue was discovered, in 1877, which, however, were too slight to offer much suggestion beyond establishing the fact that it had been painted. Traces of red were noted upon the lips, reddish brown in the hair, and red upon the straps of the sandal of the surviving foot.\* For details in the color-scheme of this cast we were therefore obliged to depend upon generalization from other works, as in the case of the Venus, though the problem was much simpler, in proportion as the drapery was less extensive and less varied. The reason for the flesh-color of the Hermes himself has already been stated; and, following the teaching of terra-cottas, the infant was made much paler, his color being practically that of the Venus, though possibly a shade pinker.

With regard to the restorations of this group, these were made, as I have said above, by the late Professor Schaper, of Berlin. A glance at the unpainted cast will show what was added by him,—the right arm and hand, both legs below the knees, the left foot, and a considerable portion of the child. The bunch of grapes held by Hermes is purely conjectural, there being no fragment left to show what he originally held in his right hand; but, Dionysos being the god of wine, the restoration of Professor Schaper is among the most plausible of those which have been suggested. In the left hand it is frequently argued that the Hermes must have held the *caduceus*, or serpent-staff, this being his most distinctive attribute; yet this does not seem a possible restoration, as the opening in the hand is flat, not round, and is moreover much smaller than the caduceus would naturally be. We have also found by experiment

---

\* See Treu, *Hermes mit dem Dionysosknaben*, Berlin, 1878.

that a stick, or staff, passed through this hand, would not rest upon the forefinger, as it should ; and not being able to suggest any other restoration which would be convincing, we have left the hand empty.

His hair is painted brown, considerably darker than the auburn of the Venus, and gilded with light touches which serve to brighten the color, without interfering with it. The narrow fillet which encircles the head has also been gilded, but we have not attempted to make anything more of it than the simple band indicated in the sculpture, though it has been suggested that this served only as the groundwork for a metal wreath.\* The eyes are brown, with pupil, rim, lids and brows drawn in a darker color, as in the Venus. The cheeks and lips are red, the former blending with the rest of the flesh. The straps of the sandals are crimson, and the broad, ornamental piece on the front is gilded. A bronze nail still clinging to this in the original shows that there was a metal decoration affixed to it, but being more than doubtful as to the character and shape of this, we did not hazard a restoration. The hair of the little Dionysos is painted in yellow and gold, his eyes blue, and his mantle a rich, winey purple, enlivened with gilt.

Over the tree-trunk, which is painted brown, hangs the chlamys, or cloak, of Hermes, one of the most marvellous representations of drapery which Greek sculpture has left us. This is a brilliant crimson, a color which is frequently found in representations of masculine drapery.

It would be interesting to discuss these two figures from the purely æsthetic point of view, without regard to their archæological correctness ; but such a discussion would carry this introduction far beyond its intended limits. Moreover, the visitor will find at hand the materials necessary to the formation of an opinion upon the effect of color on sculpture, in the comparison he can make between the white and colored casts, as they stand side by side. Opinions on matters of art are so strongly controlled by tradition and the force of association, that so radical a

\* Treu, *ubi supra*.

departure from accepted principles is almost certain to produce an unpleasant shock at first. Yet the experience of by far the greater number of those who have become acquainted with colored sculpture proves that first impressions are not at all to be relied upon. It is only after the eye has become accustomed to it that the artistic effect of combining color with form can be properly estimated; and visitors should be warned against accepting as final the opinions they form upon a first inspection, whether favorable or unfavorable.

Whatever may be the verdict as to the beauty of these colored casts, one point they have established beyond all question, — and one which I think will come as a surprise to many who have examined the subject only theoretically. This is, that color, even when applied as a coating, instead of diminishing the effect of the modelling, heightens it, and to a very considerable extent. Far from hiding the sculptor's work, it brings out its beauty. The more delicately he models, the more will the color emphasize his delicacy; and if his own work be poor, the color will accentuate his defects, possibly because it brings him into closer comparison with nature. This is shown to a remarkable degree in the heads of our two statues. That of the Venus usually passes for a fairly good head, and is sometimes spoken of even with enthusiasm, for its delicate contours and subtle smile. But, colored, it becomes hard and dry; the modelling of the cheeks, and especially about the nose, is meagre, betraying the hand of the copyist more than any other part of the statue; and defects in the modelling of the mouth and chin, hardly perceptible in the white, become unpleasantly apparent. In no part of either statue did Mr. Smith have to work so hard, or to try as many experiments in order to produce a result which would be on a par with the rest. The head of the Hermes, on the contrary, shows the marvellous beauty of the modelling much more effectively under the color than in the white cast. The exquisite modulations are so much more apparent when painted, that by contrast the white cast has a curious, empty look. And what is true of the heads is equally true of other portions of the statues. The body

and drapery of the Venus are modelled much more finely than the head, and the colors emphasize this fact.

If these experiments teach nothing else, they will at least demonstrate that the addition of color, instead of enabling the sculptor to slur his work, subjects him to new and severe exactions; and hence they offer a suggestion as to one of the most important factors in the rapid rise to perfection of Greek sculpture.

*March 1, 1892.*





















